

**2003 DRAFTING REQUEST****Assembly Substitute Amendment (ASA-AB584)**Received: **10/30/2003**Received By: **rnelson2**Wanted: **Soon**

Identical to LRB:

For: **Marlin Schneider (608) 266-0215**By/Representing: **Cynthia**This file may be shown to any legislator: **NO**Drafter: **rnelson2**

May Contact:

Addl. Drafters:

Subject: **Courts - evidence**

Extra Copies:

Submit via email: **YES**Requester's email: **Rep.Schneider@legis.state.wi.us**

Carbon copy (CC:) to:

---

**Pre Topic:**

No specific pre topic given

---

**Topic:**

Use of digital technology in evidence only if cannot be altered

---

**Instructions:**

See Attached

---

**Drafting History:**

<u>Vers.</u>	<u>Drafted</u>	<u>Reviewed</u>	<u>Typed</u>	<u>Proofed</u>	<u>Submitted</u>	<u>Jacketed</u>	<u>Required</u>
/?							
/P1	rnelson2 10/30/2003	jdyer 11/03/2003	jfrantze 11/04/2003	_____	lemery 11/04/2003		
		jdyer 11/04/2003		_____			
/1	rnelson2	jdyer	jfrantze	_____	lnorthro	lnorthro	

11/04/2003 12:21:32 PM

Page 2

<u>Vers.</u>	<u>Drafted</u>	<u>Reviewed</u>	<u>Typed</u>	<u>Proofed</u>	<u>Submitted</u>	<u>Jacketed</u>	<u>Required</u>
	11/04/2003	11/04/2003	11/04/2003	_____	11/04/2003	11/04/2003	

FE Sent For:

<END>

11/04/2003 09:25:03 AM

Page 1

**2003 DRAFTING REQUEST****Assembly Substitute Amendment (ASA-AB584)**Received: **10/30/2003**Received By: **rnelson2**Wanted: **Soon**

Identical to LRB:

For: **Marlin Schneider (608) 266-0215**By/Representing: **Cynthia**This file may be shown to any legislator: **NO**Drafter: **rnelson2**

May Contact:

Addl. Drafters:

Subject: **Courts - evidence**

Extra Copies:

Submit via email: **YES**Requester's email: **Rep.Schneider@legis.state.wi.us**

Carbon copy (CC:) to:

**Pre Topic:**

No specific pre topic given

**Topic:**

Use of digital technology in evidence only if cannot be altered

**Instructions:**

See Attached

**Drafting History:**

<u>Vers.</u>	<u>Drafted</u>	<u>Reviewed</u>	<u>Typed</u>	<u>Proofed</u>	<u>Submitted</u>	<u>Jacketed</u>	<u>Required</u>
--------------	----------------	-----------------	--------------	----------------	------------------	-----------------	-----------------

/?							
/P1	rnelson2 10/30/2003	jdyer 11/03/2003	jfrantze 11/04/2003	_____	lemery 11/04/2003		

jdyer  
11/04/2003  
11/4 jld To 11/4 Self  
11/4

11/04/2003 09:25:04 AM

Page 2

***LRBs0241***

FE Sent For:

<END>

**2003 DRAFTING REQUEST****Assembly Substitute Amendment (ASA-AB584)**Received: **10/30/2003**Received By: **rnelson2**Wanted: **Soon**

Identical to LRB:

For: **Marlin Schneider (608) 266-0215**By/Representing: **Cynthia**This file may be shown to any legislator: **NO**Drafter: **rnelson2**

May Contact:

Addl. Drafters:

Subject: **Courts - evidence**

Extra Copies:

Submit via email: **YES**Requester's email: **Rep.Schneider@legis.state.wi.us**

Carbon copy (CC:) to:

**Pre Topic:**

No specific pre topic given

**Topic:**

Use of digital technology in evidence only if cannot be altered

**Instructions:**

See Attached

**Drafting History:**

<u>Vers.</u>	<u>Drafted</u>	<u>Reviewed</u>	<u>Typed</u>	<u>Proofed</u>	<u>Submitted</u>	<u>Jacketed</u>	<u>Required</u>
1/?	rnelson2	1/1 11/4 JLD	11/4	11/4			

FE Sent For:

&lt;END&gt;

**ENTERPRISE IT WEEK at CDXPO. NOV. 17 - 20, 2003 • Las Vegas** // Featuring keynotes by HP, Cisco, Peoplesoft, a

#### Sponsored Links

##### Promotional Products

Get custom printed products quick and easy online!

##### Discounted Promo Items

500,000 Unique Items Promote Your Business or Profession

##### Low Cost Promotions

Giveaway software worth \$100's customizable and inexpensive

##### Sharper Promotional

Unique and high-end promo sharper company image an

internet.com

You are in the: Small Business Channel

Jump to Website

internet.com

**(Webopedia)**

**The #1 online encyclopedia  
dedicated to computer technology**

Enter a keyword...

...or choose a category.

#### MENU

[Home](#)  
[Term of the Day](#)  
[New Terms](#)  
[New Links](#)  
[Quick Reference](#)  
[Did You Know?](#)  
[Search Tool](#)  
[Tech Support](#)  
[Webopedia Jobs](#)  
[About Us](#)  
[Link to Us](#)  
[Advertising](#)

#### Compare Prices:

 **HardwareCentral**

#### Talk To Us...

[Submit a URL](#)  
[Suggest a Term](#)  
[Report an Error](#)

REQUEST IT

REGISTER IT

RENEW IT

**DOMAIN  
BANK**

COM  
NET  
ORG  
INFO  
BIZ  
US  
AERO

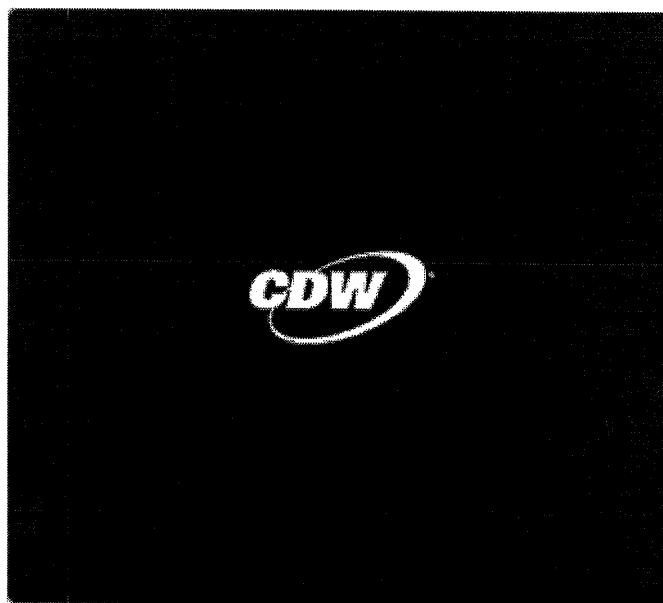
internet.com

[Developer](#)  
[DevX](#)  
[Downloads](#)

## digital watermark

Last modified: Monday, October 27, 2003

Also referred to as simply *watermarking*, a pattern of bits inserted into a digital image, audio or video file that identifies the file's copyright information (author, rights, etc.). The name comes from the faintly visible watermarks imprinted on stationery that identify the manufacturer of the stationery. The purpose of digital watermarks is to provide copyright protection for intellectual property that's in digital format.



Unlike printed watermarks, which are intended to be somewhat visible, digital watermarks are designed to be completely invisible, or in the case of audio clips, inaudible. Moreover, the actual bits representing the watermark must be scattered throughout the file in such a way that they cannot be identified and manipulated. And finally, the digital watermark must be robust enough so that it can withstand normal changes to the file, such as reductions from lossy compression algorithms.

Satisfying all these requirements is no easy feat, but there are a number of companies offering competing technologies. All of them work by making the watermark appear as *noise* - that is, random data that exists in most digital files

[EarthWeb](#)  
[Graphics](#)  
[Interactive Marketing](#)  
[International](#)  
[Internet Lists](#)  
[Internet News](#)  
[Internet Resources](#)  
[IT](#)  
[Linux/Open Source](#)  
[Small Business](#)  
[Windows Technology](#)  
[Wireless Internet](#)  
[xSP Resources](#)

[Search internet.com](#)  
[Advertise](#)  
[Corporate Info](#)  
[Newsletters](#)  
[Tech Jobs](#)  
[E-mail Offers](#)

#### Internet commerce

[Be a Commerce Partner](#)  
[Submit Your Site](#)  
[Register Domains](#)  
[Reference Library](#)  
[Revenue Share With Us](#)  
[Best Deals on PDAs!](#)  
[Find a Consultant](#)  
[Shop Digital Cameras](#)  
[Web Hosting](#)  
[Search Web Hosting](#)  
[Business Search](#)

anyway. To view a watermark, you need a special program that knows how to extract the watermark data.

Watermarking is also called *data embedding* and *information hiding*.

•[E-mail this definition to a colleague](#)•

#### Sponsored Listings

For internet.com pages about **digital watermark** [CLICK HERE](#). Also check out the following links!

#### LINKS

✳ = Great Page!

#### DRM Watch ✳

Analysis of digital rights management technology.

#### Digital Watermarking Links

Good collection of links to papers on digital watermarking. Also includes a link to the watermarking Webring.

#### Information Hiding Home Page

Provides a brief history of steganography, with links to image watermarking methods, annotated bibliographies, possible problems and failures, companies, products, research groups and news items.

#### Look, it's not there

Byte article (January, 1997) by Jian Zhao that describes how digital watermarking works.

#### Watermarking and Data Hiding Resources

Huge collection of references on multimedia watermarking and data hiding research and technology.

#### Webreference's Digital Watermark page

Contains links to companies developing digital watermark products, and articles about digital watermarks.

#### Sponsored Listings

#### Related Categories

[Digital Rights Management \(DRM\)](#)

[Multimedia](#)

#### Related Terms

[copy protection](#)

[FlashPix](#)

[Product Activation](#)

[software piracy](#)

#### (Webopedia)

Give Us Your Feedback

**Shopping**  
**DIGITAL WATERMARK**  
**Products**  
 Compare Products, Prices and Stores

**Shop by Category:**  
**Graphics and Publishing**  
**Software**  
 2 Model Matches

**Education and Reference**  
**Software**  
 1 Model Matches

# Watermarking World

 NEWS ABOUT PARTNERS (  
 [HELP](#)

## WATERMARKING

- Biography
- FAQ

## MAILINGLIST

- Management
- Archive

## CONFERENCES

- Calls

## BENCHMARKING

- Stirmark
- CheckMark
- Optimark

## BOOKS

## LINKS

- Companies
- Research
- Others

## WEBRING

## DISCLAIMER

## Digital Watermarking Frequently Asked Questions (FAQ)

*Please help us: The FAQs below are preliminary and not complete. Anybody having an answer to an open item is encouraged to send us his contribution. We will continually work on the FAQs and update them. Thanks!*

Last modified: OCT 14, 2001

## Introduction

This document tries to answer question frequently asked on the Watermarking mailing list. To join this list, please refer to the subscription information on <http://www.watermarkingworld.org/ml.html>.

Many people have contributed to this FAQ. In alphabetical order:

- Fabien Petitcolas
- Jong-Hyeon Lee
- Matthieu Brunet
- Stefan Katzenbeisser
- Martin Kutter

## General questions

- **What is the difference between "copy protection" and "copyright protection"?**  
*Copy protection* attempts to find ways, which limit the access to copyrighted material and/or inhibit the copy process itself. Examples of copy protection include encrypted digital TV broadcast, access controls to copyrighted software through the use of license servers and technical copy protection mechanisms on the media. A recent example is the copy protection mechanism on DVDs. However, copy protection is very difficult to achieve in open systems, as recent incidents (like the DVD hack) show. *Copyright protection* inserts copyright information into the digital object without a loss of quality. Whenever the



copyright of a digital object is in question, this information is extracted to identify the rightful owner. It is also possible to encode the identity of the original buyer together with the identity of the copyright holder, which allows tracing of any unauthorized copies. The most prominent way of embedding information in multimedia data is the use of digital watermarking.

Whereas copy protection seems to be difficult to implement, copyright protection protocols based on watermarking and strong cryptography are likely to be feasible.

- **What is the difference between visible and invisible watermarking?**

[Send answer.](#)

- **What is the watermark?**

Although different authors use different meaning for the word 'watermark', it is mostly agreed that the watermark is what is actually imperceptibly added to the cover-signal in order to convey the hidden data.

- **Usefulness?**

[Send answer.](#)

- **What is the original image?**

Consider the following scenario: Alice, the copyright holder, inserts her own watermark into some object, locks the original away and keeps selling the marked image. Bob can now try to insert his own watermark into the already marked object. In case of a dispute, both Alice and Bob are able to prove the presence of "their" watermark and claim ownership of the document. How can this situation be resolved?

The "traditional" answer is: look at the objects Alice and Bob claim to be the original. Alice's original should not contain a watermark, whereas Bob's "original" must contain Alice's watermark (if we assume that Bob cannot remove marks). This situation would indicate that Bob inserted his watermark after Alice and so one may conclude that Alice is the rightful owner.

Unfortunately, sometimes the situation is not that simple. It has been shown that a particular class of watermarking schemes, Bob can insert his watermark in a way that it also seems to be present in the copy Alice locked away (although he has no access to it). So Alice's original contains Bob's mark and Bob's "original" contains Alice's mark. This type of attack is called "inversion attack" or more "dead lock attack". There is no way to resolve copyright ownership in this case. This result indicates that watermarking "alone", that is without a carefully designed protocol around it, will not suffice to resolve the copyright situation.

- **Why not add the copyright information into the file**

**format?**

One could define a new audio file format, in which the watermark is a part of the header block but is not removable without destroying the original signal, because part of the definition of the file format requires the watermark to be therein. In this case the signal would not really be literally 'destroyed' but any application using this file format would not touch it without a valid watermark. Some electronic copyright management system propose mechanisms like this. Such schemes are weak as anyone with a computer or a digital editing workstation would be able to convert the information to another format and remove the watermark at the same time. Finally this new audio format would be incompatible with the existing one. Thus the watermark should really be embedded in the audio signal.

This is very similar to S.C.M.S. When Philips and Sony introduced the 'S/PDIF' (Sony/Phillips Digital Interchange Format), they included the S.C.M.S. (Serial Code Management System) which provides a way copies of digital music are regulated in the consumer market. This information is added to the stream of data that contains the music when one makes a digital copy (a 'clone'). This is in fact just a bit saying: digital copy prohibited or permitted. Some professional equipment are exempt for needing S.C.M.S.

With watermarking however, the copy control information is part of the audio-visual signal and aim at surviving file format conversion and other transformations.

- **What is the difference between watermarking, steganography, and cryptography?**

While cryptography is about protecting the content of messages (their meaning), steganography is about concealing their very existence. It comes from Greek roots, literally means 'covered writing', and is usually interpreted to mean hiding information in other information. Examples include sending a message to a spy by marking certain letters in a newspaper using invisible ink, and adding sub-perceptible echo at certain places in an audio recording. It is often thought that communications may be secured by encrypting the traffic, but this has rarely been adequate in practice. Aeneas the Tactician, and other classical writers, concentrated on methods for hiding messages rather than for enciphering them; and although modern cryptographic techniques started to develop during the Renaissance, we find in 1641 that John Wilkins still preferred hiding over ciphering because it arouses less suspicion. This preference persists in many operational contexts to this day. For example, an encrypted email message between a known drug dealer and somebody not yet under suspicion,

or between an employee of a defense contractor and the embassy of a hostile power, has obvious implications.

As the purpose of *steganography* is having a covert communication between two parties whose existence is unknown to a possible attacker, a successful attack consists in detecting the existence of this communication (e.g., using statistical analysis of images with and without hidden information). *Watermarking*, as opposed to steganography, has the (additional) requirement of robustness against possible attacks. In this context, the term 'robustness' is still not very clear; it mainly depends on the application.

Copyright marks do not always need to be hidden, as some systems use *visible digital watermarks*, but most of the literature has focused on imperceptible (e.g., invisible, inaudible) digital watermarks which have wider applications. Visible digital watermarks are strongly linked to the original paper watermarks which appeared at the end of the XIII century to differentiate paper makers of that time. Modern visible watermarks may be visual patterns (e.g., a company logo or copyright sign) overlaid on digital images. The intent of use is also different: the payload of a watermark can be perceived as an attribute of the cover-signal (e.g., copyright information, license, ownership, etc.). In most cases the information hidden using steganographic techniques is not related at all to the cover. These differences in goal lead to very different hiding techniques.

- **What are 'public watermarking', 'blind watermarking', 'semi-blind watermarking', 'private watermarking', 'non-blind watermarking' and 'asymmetric watermarking'?**

There has been some confusion about the naming of various types of watermarking techniques and the main reason is that people involved in this field come from different backgrounds (in particular signal processing and computer security). On top of this some terminology has been imported from the related field of steganography.

Originally, *public watermarking* and *blind watermarking* mean the same, but the wording was confusing with *public-key watermarking* and 'signal processing people' took over the field so only the later tends to remain. In these schemes the cover signal (the original signal) is not needed during the detection process to detect the mark. Solely the key, which is typically used to generate some random sequence used during the embedding process, is required. These types of schemes can be used easily in mass market electronic equipment or software.

In some cases you may need extra information to help your detector (in particular to synchronise its random sequence on the possibly distorted test signal). In particular some

watermarking schemes require access to the 'published' watermarked signal, that is the original signal just after adding the watermark. People refer to these schemes as *semi-blind watermarking* schemes.

*Private watermarking* and *non-blind-watermarking* mean the same: the original cover signal is required during the detection process.

At last, by *asymmetric watermarking* or *public-key watermarking*, people refer to watermarking schemes with properties reminding asymmetric cryptosystem (or public key cryptosystem). No such system really exists yet although some possible suggestions have been made. In this case, the detection process (and in particular the detection key) is fully known to anyone as opposed to blind watermarking where a secret key is required. So here, only a 'public key' is needed for verification and a 'private key' (secret) is used for the embedding though. Knowledge of the public key does not help to compute the private key (at least in a reasonable time), it does not either allow removal of the mark nor it allows an attacker to forge a mark.

- **What is the difference between (semi-)fragile and robust watermarks?**

The aims of such watermarks are completely different: A (semi-)fragile watermark is a mark which is (highly) sensitive to a modification of the stego-medium. A fragile watermarking scheme should be able to detect any change in the signal and identify where it has taken place and possibly what the signal was before modification. It serves at proving the authenticity of a document. On the opposite, a robust watermark should be stuck to the document it has been embedded in, in such a way that any signal transform of reasonable strength cannot remove the watermark. Hence a pirate willing to remove the watermark will not succeed unless they debase the document too much to be of commercial interest.

The latter form is the very challenging and attracts most research.

- **What are fingerprints?**

Fingerprints are characteristics of an object that tend to distinguish it from other similar objects. They enable the owner to trace authorized users distributing them illegally. In the case of encrypted satellite television broadcasting, for instance, users could be issued a set of keys to decrypt the video streams and the television station could insert fingerprint bits into each packet of the traffic to detect unauthorized uses. If a group of users give their subset of keys to unauthorized people (so that they can also decrypt the traffic) at least one of the key donors can be traced

when the unauthorized decoder is captured. In this respect, fingerprinting is usually discussed in the context of the *traitor tracing* problem.

- **What is the oldest (historical) method developed/used for the purpose of ownership protection?**

The original paper watermarks appeared at the end of the 13<sup>th</sup> century to differentiate paper makers of that time. Modern visible watermarks may be visual patterns (e.g., a company logo or copyright sign) overlaid on digital images and are widely used by many photographers who do not trust invisible watermarking techniques enough.

In the 17<sup>th</sup> century, Claude Gellée of Lorraine (1600–1682), also known as Claude Lorrain, introduced a method for protecting his intellectual property nearly hundred years before any relevant law was introduced (the first 'copyright' law was the 'Statute of Anne' introduced by the English Parliament in 1710.) From some time around 1635 until the end of his life in 1682, Lorrain kept a book that he called the *Liber Veritatis* (now kept in the British Museum in London). The *Liber Veritatis* was a collection of drawings in the form of a sketchbook. The book was specially made for him, with a scheme of alternating pages, four blue pages followed by four white, which repeated in this manner and contained around 195 drawings. One of Lorrain's biographers, reported that the purpose in creating the *Liber Veritatis* was to protect Lorrain against forgery (it is not clear 'how far the objective of protection against forgery can be accepted as an adequate example of the book's *raison d'être*') In fact, any comparison between drawings and paintings goes to show that the former were designed to serve as a 'check' on the latter and from the *Liber* any very careful observer could tell whether a given painting was a forgery or not.

Similar techniques are being used today. ImageLock, for instance, keeps a central database of image digests and periodically searches the Web for images having the same digest. Tracking systems based on private watermarks also require central databases. Unfortunately, apart from the extent of the problem (which is now global) nothing much has changed, since such services still do not provide any proof of infringement.

© 2000-2002 by WatermarkingWorld  
Design and Concept by Martin Kutter

**Nelson, Robert P.**

---

**From:** Kieper, Cynthia L.

**Sent:** Tuesday, October 28, 2003 10:49 AM

**To:** Nelson, Robert P.

**Subject:** Assembly bill 584; Representative Schneider

Dear sir,

Representative Schneider would like a (sub-amendment?) I believe it's called on AB 584. He asking that digital photography technology or audio recordings must have technology that cannot be altered. He wants it defined within the rules of evidence. In addition he wants the penalty to be a class A misdemeanor along with the perjury charges. If it involves the DA, Assistant DA or private attorney, grounds for disbarment.

Cynthia  
266-0215

10/28/2003



5004 (10/30)  
State of Wisconsin  
2003 - 2004 LEGISLATURE

LRBs0241/P1

D-N

RPN Jd

PRELIMINARY DRAFT - NOT READY FOR INTRODUCTION  
ASSEMBLY SUBSTITUTE AMENDMENT,  
TO 2003 ASSEMBLY BILL 584

1 AN ACT <sup>Gen</sup> relating to: ~~admissibility~~ <sup>admissibility</sup> of digitally produced photograph, <sup>my</sup> film <sup>motion picture</sup>, audio,  
2 or video.

*The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:*

3 ~~SECTION 1. 910.01 (1) of the statutes is renumbered 910.01 (1m).~~ <sup>may be renumbered (5m) may be renumbered</sup>  
4 <sup>plain text</sup>

5 SECTION 2. <sup>x</sup> 910.01 (1g) of the statutes is created to read:

6 910.01 (1g) DIGITAL REPRESENTATION. "Digital representation" means any  
7 recording or image of a person, place, document, sound, or event <sup>✓</sup> that is created or  
8 stored by data in the form of numerical digits.

9 <sup>fix component</sup> SECTION 3. 910.01 (2) <sup>x</sup> of the statutes is <sup>renumbered 910.01 (4m) and</sup> amended to read:

10 910.01 (2) <sup>4m ← 3</sup> PHOTOGRAPHS. "Photographs" include still photographs, X-ray films,  
11 and motion pictures, and digital representations. <sup>✓</sup>

SECTION 4. 910.025 of the statutes is created to read:

SECTION #. 910.01 (4) <sup>x</sup> of the statutes is renumbered  
910.01 (2m).

1           **910.025 Inadmissibility of a digital representation.** In any action or  
2 proceeding, except an action under s. 948.05 or 948.12, a digital representation in the  
3 form of a photograph, film, motion picture, audio, or video is not admissible for  
4 purposes of proving the content of that digital representation unless that digital  
5 representation is in a format that includes information that cannot be identified or  
6 manipulated and that shows that the digital representation has not been altered  
7 from its original representation.

8           **SECTION 5.** Subchapter III, (title) of chapter 946 of the statutes is amended to read:  
9 ~~PERJURY, DIGITAL ALTERATION, AND FALSE SWEARING~~ is amended to read: **CHAPTER 946** ← **CRS**  
10 **SUBCHAPTER III** ← **NO ③**  
          **PERJURY, DIGITAL ALTERATION, AND FALSE SWEARING**

11           **SECTION 6.** 946.33 of the statutes is created to read:

12           **946.33 Alteration of a digital representation.** (1) In this section, “digital  
13 representation” means any recording or image of a person, place, document, sound,  
14 or event that is created or stored by data in the form of numerical digits.

15           (2) Whoever admits into evidence a digital representation for the purpose of  
16 proving the content of that digital representation knowing that the digital  
17 representation has been altered from its original representation is guilty of a class  
18 A misdemeanor.

19           **SECTION 7. Initial applicability.**

20           (1) This act first applies to actions commenced on the effective date of this  
21 subsection.

22           (END)

↓-note  
↓



(INSERT 1-3)

SECTION #. Am; 802.05 (1)(c)

802.05(1) <sup>8</sup>

number  
(2m)

(c) The requirement of a handwritten signature subscribing pleadings, motions or other papers filed in court may be satisfied by a duplicate, as defined in s. 910.01 <sup>4</sup>, if a handwritten signature appears on the original document and the signing party or his or her attorney retains the original document.

(end ins 1-3)

**DRAFTER'S NOTE**  
**FROM THE**  
**LEGISLATIVE REFERENCE BUREAU**

LRBs0241/P1dn

*[Handwritten signature]*

The Supreme Court disciplines members of the State Bar of Wisconsin, and the legislature has no authority to regulate or discipline those members. I therefore did not add language regarding the disbarment of DAs, etc., if they use altered digital representations. Section 946.31<sup>✓</sup> of the statutes already covers perjury, so no change is needed in that statute. \*

I made this a preliminary draft because I was unsure if I did what you intended.

Robert P. Nelson  
Senior Legislative Attorney  
Phone: (608) 267-7511  
E-mail: robert.nelson@legis.state.wi.us

**DRAFTER'S NOTE**  
**FROM THE**  
**LEGISLATIVE REFERENCE BUREAU**

LRBs0241/P1dn  
RPN:jld:jf

November 4, 2003

The Supreme Court disciplines members of the State Bar of Wisconsin, and the legislature has no authority to regulate or discipline those members. I therefore did not add language regarding the disbarment of DAs, etc., if they use altered digital representations. Section 946.31 of the statutes already covers perjury, so no change is needed in that statute.

I made this a preliminary draft because I was unsure if I did what you intended.

Robert P. Nelson  
Senior Legislative Attorney  
Phone: (608) 267-7511  
E-mail: [robert.nelson@legis.state.wi.us](mailto:robert.nelson@legis.state.wi.us)

**Nelson, Robert P.**

---

**From:** Emery, Lynn  
**Sent:** Tuesday, November 04, 2003 9:32 AM  
**To:** Nelson, Robert P.  
**Subject:** FW: Draft review: LRB 03s0241/P1 Topic: Use of digital technology in evidence only if cannot be altered

-----Original Message-----

**From:** Schneider, Marlin  
**Sent:** Tuesday, November 04, 2003 9:32 AM  
**To:** Emery, Lynn  
**Subject:** RE: Draft review: LRB 03s0241/P1 Topic: Use of digital technology in evidence only if cannot be altered

**This looks fine me. - Marlin**

-----Original Message-----

**From:** Emery, Lynn  
**Sent:** Tuesday, November 04, 2003 9:25 AM  
**To:** Rep.Schneider  
**Subject:** Draft review: LRB 03s0241/P1 Topic: Use of digital technology in evidence only if cannot be altered

**Following is the PDF version of draft LRB 03s0241/P1 and drafter's note.**

11/04/2003



5004 (12/14)  
State of Wisconsin  
2003 - 2004 LEGISLATURE

1  
LRBs0241/P1  
RPN:jld:jf

~~PRELIMINARY DRAFT - NOT READY FOR INTRODUCTION~~

ASSEMBLY SUBSTITUTE AMENDMENT ,

TO 2003 ASSEMBLY BILL 584

Regen

1 AN ACT *to renumber* 910.01 (1) and 910.01 (4); *to renumber and amend* 910.01  
2 (2); *to amend* 802.05 (1) (c) and subchapter III, (title) of chapter 946 [precedes  
3 946.31]; and *to create* 910.01 (1g), 910.025 and 946.33 of the statutes; **relating**  
4 **to:** admissibility of digitally produced photograph, film, motion picture, audio,  
5 or video.

*The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:*

6 SECTION 1. 802.05 (1) (c) of the statutes is amended to read:

7 802.05 (1) (c) The requirement of a handwritten signature subscribing  
8 pleadings, motions or other papers filed in court may be satisfied by a duplicate, as  
9 defined in s. 910.01 (4) (2m), if a handwritten signature appears on the original  
10 document and the signing party or his or her attorney retains the original document.

11 SECTION 2. 910.01 (1) of the statutes is renumbered 910.01 (5m).

1       **SECTION 3.** 910.01 (1g) of the statutes is created to read:

2       910.01 (1g) DIGITAL REPRESENTATION. “Digital representation” means any  
3       recording or image of a person, place, document, sound, or event that is created or  
4       stored by data in the form of numerical digits.

5       **SECTION 4.** 910.01 (2) of the statutes is renumbered 910.01 (4m) and amended  
6       to read:

7       910.01 (4m) <sup>✓</sup>PHOTOGRAPHS. “Photographs” include still photographs, X-ray  
8       films, and motion pictures, and digital representations.

9       **SECTION 5.** 910.01 (4) of the statutes is renumbered 910.01 (2m). <sup>✓</sup>

10      **SECTION 6.** 910.025 of the statutes is created to read:

11      **910.025 Inadmissibility of a digital representation.** In any action or  
12      proceeding, except an action under s. 948.05 or 948.12, a digital representation in the  
13      form of a photograph, film, motion picture, audio, or video is not admissible for  
14      purposes of proving the content of that digital representation unless that digital  
15      representation is in a format that includes information that cannot be identified or  
16      manipulated and that shows that the digital representation has not been altered  
17      from its original representation.

18      **SECTION 7.** Subchapter III, (title) of chapter 946 [precedes 946.31] of the  
19      statutes is amended to read:

20                                   **CHAPTER 946**

21                                   SUBCHAPTER III

22                                   PERJURY, DIGITAL ALTERATION, <sup>✓</sup>

23                                   AND FALSE SWEARING

24      **SECTION 8.** 946.33 of the statutes is created to read:

**946.33 Alteration of a digital representation.** (1) In this section, “digital representation” means any recording or image of a person, place, document, sound, or event that is created or stored by data in the form of numerical digits.

(2) Whoever admits into evidence a digital representation for the purpose of proving the content of that digital representation knowing that the digital representation has been altered from its original representation is guilty of a Class A misdemeanor.

## SECTION 9. Initial applicability.

(1) This act first applies to actions commenced on the effective date of this subsection.

**(END)**